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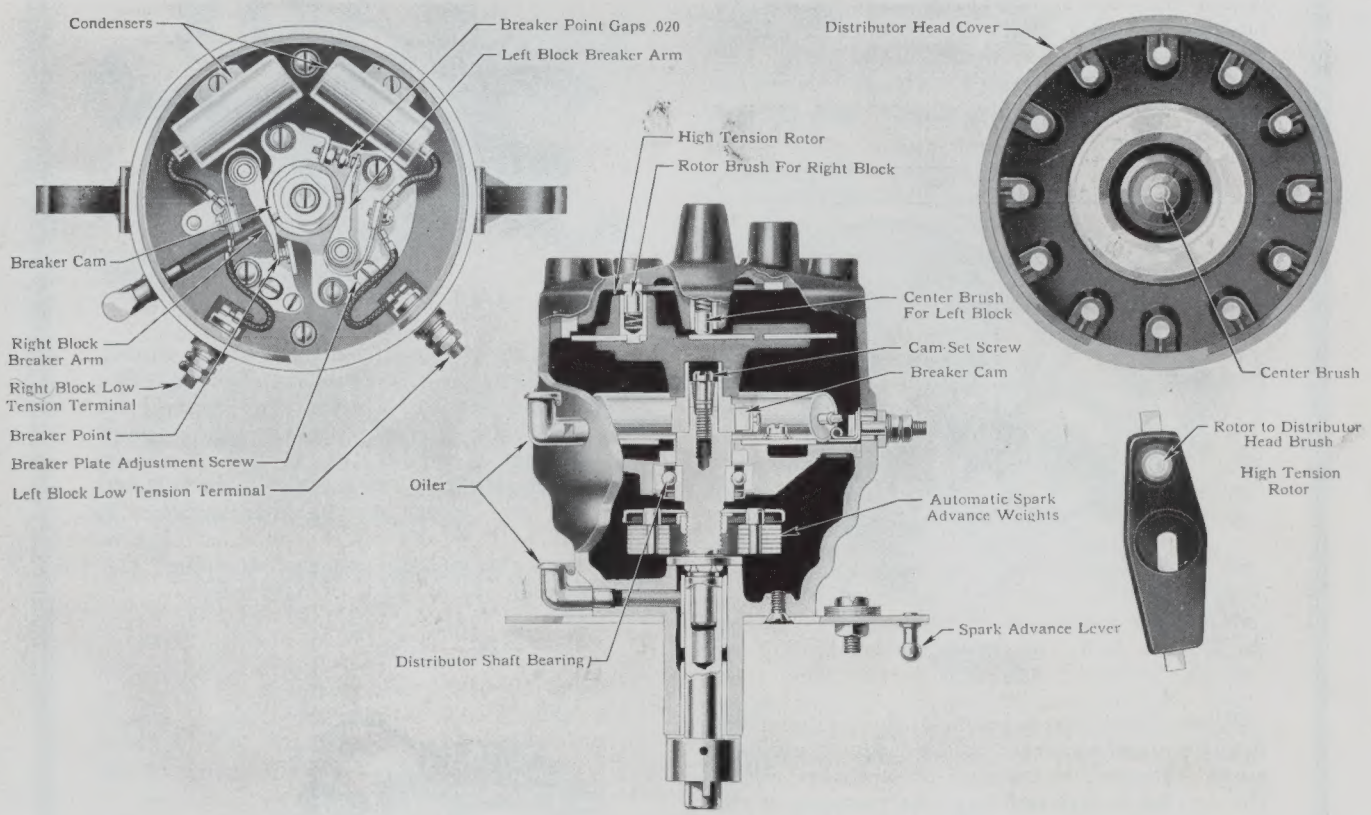

Fig. 123

Ignition V-12

In general design and construction, the distributor used on V-12 cars closely resembles the V-8 distributor. It consists of the automatic advance governor, located in the lower part of the distributor housing, the breaker mechanism, located on a plate in the upper part of the housing and the secondary distributing mechanism on the top of the unit.

A centrifugal type governor automatically advances the spark to meet all normal driving conditions. The manual spark advance is 20° (on the flywheel) and the automatic advance is 24° giving a total advance of 44°.

AUTOMATIC CHAIN ADJUSTMENT

The tension of the timing chain on V-12 Lincolns is automatically adjusted by a spring actuated mechanism contained in an idler sprocket. See Fig. 124. The idler sprocket support, which is mounted on the crankcase, is rectangular shaped at the outer end. Over this is placed a movable slide which carries the sprocket bushing. Interposed between the support and the sprocket bushing are two springs which maintain a constant pressure against the bushing and thus causes the sprocket to take up any slack which may occur in the chain. The movable slide is provided with ratchets which engage serrations in the support and prevent reverse action.

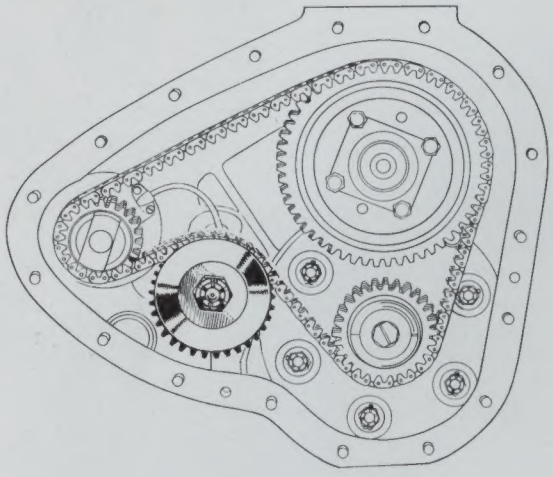

Fig. 124

When the engine is running, the ratchets bear firmly against the teeth in the support, giving a rigid, stationery bearing for the sprocket. When the engine is not running, the pressure of the compression springs is sufficient to take up any slack in the chain and, as wear takes place, the ratchet latches slip over the teeth on the support and engage the next pair of teeth in the ratchet.

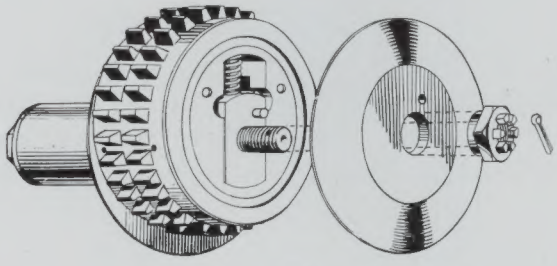

Fig. 125

Lubrication of the automatic chain adjustment is provided through a pressure feed through the support to the bushing, and, except when replacing a chain, it should not be necessary to give any attention to this unit. When sufficient wear has taken place that the adjustment has reached its maximum, the chain should be replaced, proceeding as follows after the timing chain cover has been removed.

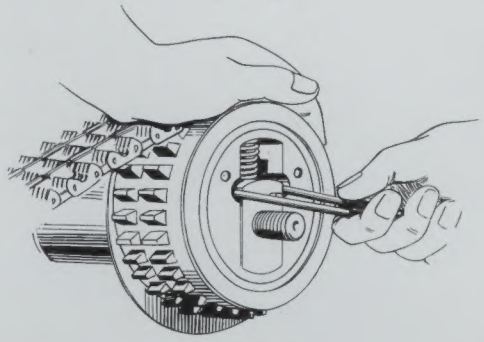

Fig. 126

Remove the cotter pin, nut and thrust washer from the face of the idler sprocket. (See Fig. 125.) The ratchet latches can then be released by inserting two large nails or cotter pins through the openings in the face of the slide as shown in Fig. 126. Holding the latches in the released position, press down on the idler sprocket as far as it will go and insert a wooden plug to hold it in the position illustrated in Fig. 127. The plug should be made of hardwood.

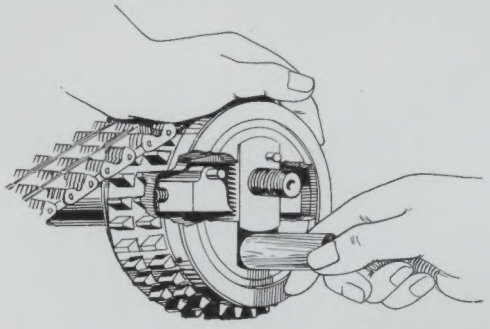

Fig. 127

After installing a new chain, remove the plug and the chain adjuster will automatically place the proper tension on the chain.

BRAKE BOOSTER AUTOMATIC CONTROL VALVE

A few cases have been reported of a whistling noise in the automatic control valve when the brakes are applied. This is caused by the holes in the control valve diaphragm being in line with the holes in the follower plate.

To eliminate this condition, disassemble the control valve and turn the follower plate, Fig. 128, until the holes are staggered from the holes in the diaphragm as indicated in the illustration.

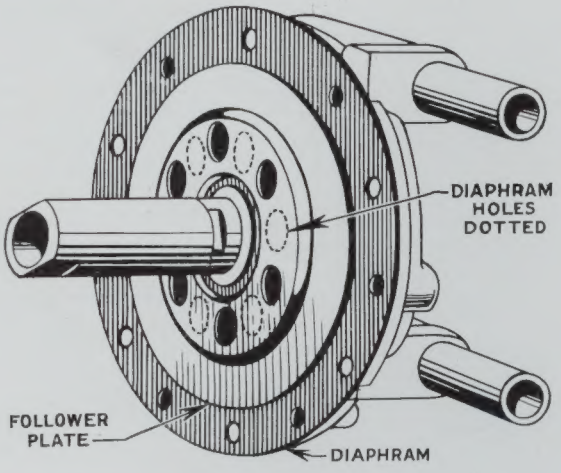

Fig. 128

When reinstalling the control valve, it is important that the hoses be properly connected. It will be noted that one connection on the valve is marked "to manifold" and the other "to cylinder." Make sure the correct hose is assembled to each of these connections.

HORN CHANGEOVER V-8

Requests are occasionally received for the necessary parts to install two horns on V-8 cars, the same as are used on V-12 cars. The following is a list of the necessary changeover parts which should be ordered under the part number KA-10345-R. The list price of the changeover is $40.50 subject to 25% discount to dealers.

PARTS ADDED

1—KA-10264-B	Wire and conduit assy. for right headlamp and horn
1—KB-12260-C	Support assy. for headlamps (two horns)
1—KB-7533-A	Wire assy. from horn button to switch
1—KB-10380-A	Horn (right) and bracket assy. (vibrator type)
2— K-1000-C	Nut (plain) 1¼-28
2— K-383-B	Washer (lock) ¼" (for horn and bracket assy. to headlamp support
2— K-1605-A	Screw ¼-28 x ¾
1—KA-10271	Wire assy. from left terminal block to rt. term. block in radiator
1—KA-10272	Wire assy. for horn from rt. term. block in radiator to switch
2—KA-10273	Conduit for right horn wires
1—KB-10394	Elbow for horn to radiator conduit
1— K-955	Nut for horn to radiator conduit elbow
1— K-1619	Lock washer for horn to radiator conduit elbow
1— K-10646	Connector and sleeve assy. for wires
2— K-10253	Terminal for horn button to switch wires
2—KB-10386	Reinforcement for right horn bracket spring

PARTS REMOVED

1—KA-10270	Wire and conduit assy. from right headlamp to horn
1—KA-7589	Jumper for horn button wire
1—KA-7533-B	Wire assembly from horn button to switch
1—KA-12260-B	Support assy. for headlamps (one horn)
1— K-7534	Terminal for horn button wire
2— K-693	Screw for horn button wire terminal
1— K-7521	Insulator for horn wire terminal

MUFFLER V-8

A change has been made in the inner tube in the muffler KA-8605-C, to prevent the possibility of distortion from expansion. This tube is now made of heavier gauge steel.

Some cases have been encountered where distortion of the inner tube has resulted in back pressure which affects the maximum speed of the car. Should this condition be noted, a check of the muffler can be made by removing the assembly from the car and looking thru the tube. If the inner tube is not perfectly round thruout its entire length, the muffler should be replaced.

WRENCH FOR DOOR AND REGULATOR HANDLES V-8

A wrench similar to the one illustrated in Fig. 99, Page 94, Sept.-Oct. Service Bulletin is now available for removing inside door and regulator handles in present series V-8 cars.

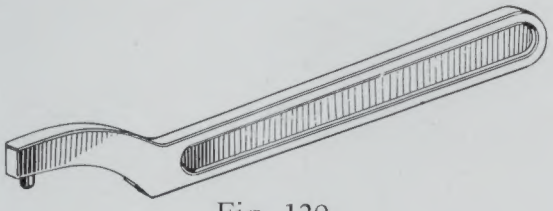

Fig. 129

The part number is 5Z-3438 and the price is $0.65 net. Dealers should place their orders for this wrench direct with Hinckley-Meyers Co., Jackson, Mich.

FRONT FENDERS V-8 AND V-12

Fig. 130

The front fenders used on V-8 cars are identical with those used on the V-12 with the exception that a small portion of the apron is cut away as shown in Fig. 130. We are therefore, supplying the V-12 fenders in every case where front fenders are ordered for V-8 cars and it will be necessary to cut away the end of the apron before attempting to install the fender. Front fenders for V-8 or V-12 cars should be ordered under the following part numbers:

KB-8910-B Front fender right—without well
KB-8911-B Front fender left—without well
KB-8916-D Front fender right—with well
KB-8917-D Front fender left—with well

New Style Tool Box

When servicing right or left front fenders on cars equipped with the old style tool box, it is necessary to install the new style fender together with the later type tool box. The old style tool box can be distinguished from the new style by the fact that it is bolted to the fender and has a lock on the end while the new style is bolted to the frame and has a lock on the inside cover.

The following is a list of the parts needed to make this changeover. Owners should be charged for the fender only, the additional parts required for the installation being supplied gratis.

Right Fender

1—KB-8910-B Fender—plain
KB-8916-D Fender—with well
1—K-9401-A Tool box
1—K-9455-B Cover assy.
4—K-1609-A Lock washer
4—K-401-A Screw
1—KB-33961 Lock (12 cylinder)
KA-62893 Lock (8 cylinder)
4—K-155 Screw

Left Fender

1—KB-8911-B Fender—plain
KB-8917-D Fender—with well
1—K-8981 Pad—rubber
2—K-977-A Nut
2—K-1586-A Washer

TUNING ENGINE V-8 AND V-12

When making engine tuneup adjustments it is important to observe the following items.

Do not attempt to adjust the carburetor, until the breaker points and spark plug gaps are correctly adjusted. (Spark plugs should be cleaned and set to .025 gap every 5,000 miles. Breaker points should be set to .020 gap.) After these adjustments have been made, the carburetor can then be adjusted if necessary.

When tuning engine, it is seldom necessary to check the ignition timing as the original setting will not change unless tampered with. It should only be necessary to check breaker point gaps to correct timing inaccuracies.

READ THE BULLETIN

It is important that all salesmen, as well as Service Department employees, read the bulletin. In many cases, the information contained in the bulletin will prove highly advantageous to salesmen, and this means of becoming more familiar with the Lincoln should not be overlooked.

A complete file of bulletins should always be readily available in the Service Manager's desk. It is also the Service Manager's responsibility to see that all mechanics become familiar with the contents of each issue of the Bulletin. Some dealers accomplish this by discussing each article in a general meeting of the Service Department employees, while others insist upon each mechanic reading the bulletin and placing his initials on a copy which is retained in the office file.

Fig. 131

WRENCH FOR UNIVERSAL JOINT NUT

A special socket wrench for removing the nut which holds the Universal Joint on the spline shaft is illustrated in Fig. 131.

The wrench can be used on all Lincolns heretofore manufactured as well as current production V-8 and V-12 cars.

The number of this tool is 5-Z-3441 and the price is $1.20 net to dealers. Orders should be placed direct with Hinckley Meyers Co., Jackson, Mich.